

**In the Claims:**

The current status of all claims is listed below and supersedes all previous lists of claims.

Please cancel claims 117-127, 130-135, 139-142, and 152-163 and amend claims 116, 128, 129, 136, and 143 as follows:

1-111. (canceled).

112. (previously presented) An isolated peptide comprising the amino acid sequence SEQ ID NO:1.

113. (previously presented) The peptide of claim 112 wherein the peptide is 7 to 50 amino acids in length.

114. (previously presented) The peptide of claim 112 comprising the amino acid sequence SEQ ID NO:2.

115. (previously presented) The peptide of claim 114 wherein the peptide is up to 50 amino acids in length.

116. (currently amended) An isolated peptide A fusion protein comprising SEQ ID NO:1 and ~~other gliadin or a non-gliadin sequence.~~

117-127. (canceled).

128. (currently amended) An isolated product comprising two or more of:  
a peptide comprising the amino acid sequence SEQ ID NO:1, ~~or a fusion protein thereof;~~

a peptide 7 to 50 amino acids in length comprising the amino acid sequence SEQ ID NO:1, or a fusion protein thereof;

a peptide comprising the amino acid sequence SEQ ID NO:2, or a fusion protein thereof;

a peptide up to 50 amino acids in length comprising the amino acid sequence SEQ ID NO:2, or a fusion protein thereof; and

a fusion protein peptide comprising SEQ ID NO:1 and other gliadin or a non-gliadin sequence, or a fusion protein thereof;

a peptide comprising SEQ ID NO:1 and other gliadin or non-gliadin sequence, wherein the other gliadin sequence is from wheat, rye, barley, oats, or triticale, or a fusion protein thereof;

a peptide comprising SEQ ID NO:1 and a non-gliadin sequence, or a fusion protein thereof; and

an analogue of a peptide comprising the amino acid sequence SEQ ID NO:1 which is capable of being recognised by a T cell receptor that recognises a peptide comprising the amino acid sequence SEQ ID NO:1, wherein the peptide analogue is not more than 50 amino acids in length.

129. (currently amended) A composition comprising a peptide or a fusion protein, or an analogue thereof, and a pharmaceutically acceptable carrier or diluent, wherein the peptide is:

a peptide comprising the amino acid sequence SEQ ID NO:1, or a fusion protein thereof;

a peptide 7 to 50 amino acids in length comprising the amino acid sequence SEQ ID NO:1, or a fusion protein thereof;

a peptide comprising the amino acid sequence SEQ ID NO:2, or a fusion protein thereof; or

a peptide up to 50 amino acids in length comprising the amino acid sequence SEQ ID NO:2, or a fusion protein thereof; and

wherein the fusion protein a peptide comprising comprises SEQ ID NO:1 and other gliadin or a non-gliadin sequence, or a fusion protein thereof;

a peptide comprising SEQ ID NO:1 and other gliadin or non gliadin sequence, wherein the other gliadin sequence is from wheat, rye, barley, oats, or triticale, or a fusion protein thereof;

a peptide comprising SEQ ID NO:1 and a non gliadin sequence, or a fusion protein thereof;

wherein the analogue is an analogue of a peptide comprising the amino acid sequence SEQ ID NO:1 which is capable of being recognised by a T cell receptor that recognises a peptide comprising the amino acid sequence SEQ ID NO:1, wherein the peptide analogue is not more than 50 amino acids in length.

130-135. (canceled).

136. (currently amended) A kit comprising a peptide of claim ~~112, 116, or 118~~, 112 or 116 and a means to detect the recognition of the peptide by a T cell.

137. (previously presented) The kit of claim 136 wherein the means to detect recognition comprises an antibody to IFN- $\gamma$ .

138. (previously presented) The kit of claim 137 wherein the antibody is immobilised on a solid support and, optionally, comprises a means to detect any complexes formed between the antibody and IFN- $\gamma$ .

139-142. (canceled).

143. (currently amended) A method of diagnosing coeliac disease or susceptibility to coeliac disease in an individual comprising:

a) contacting the individual or a sample from the individual with a peptide of claim ~~112, 116, or 118~~ 112 or 116; and

b) determining whether a T cell in the sample recognises the peptide, wherein recognition by the T cell indicates that the individual has or is susceptible to coeliac disease.

144. (previously presented) The method of claim 143 wherein a) comprises administering the peptide to the skin of the individual, and b) comprises detecting the presence of inflammation at the site of administration, wherein detection of inflammation indicates that the T cell of the individual recognises the peptide.

145. (previously presented) The method of claim 143 wherein the sample is a blood sample.

146. (previously presented) The method of 143 wherein the T cell is not re-stimulated in an antigen specific manner *in vitro* before determining whether the T cell in the sample recognises the peptide.

147. (previously presented) The method of claim 143 wherein the recognition of the peptide by the T cell is determined by detecting the secretion of a cytokine from the T cell.

148. (previously presented) The method of claim 147 wherein the cytokine is IFN- $\gamma$ .

149. (previously presented) The method of claim 147 wherein the cytokine is detected by allowing the cytokine to bind to an immobilised antibody specific to the cytokine and then detecting the presence of any complex formed between the antibody and cytokine.

150. (previously presented) The method of claim 143 wherein b) comprises measuring whether the peptide binds a T cell receptor.

151. (previously presented) A method of diagnosing coeliac disease or susceptibility to coeliac disease in an individual comprising detecting the presence of an antibody that binds to a

peptide comprising SEQ ID NO:1 in a sample from the individual, wherein the presence of the antibody indicates that the individual has or is susceptible to coeliac disease.

152-163. (canceled).